UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

HEADWATER RESEARCH LLC, *Plaintiff*, v. SAMSUNG ELECTRONICS CO., LTD. and SAMSUNG ELECTRONICS AMERICA, INC. *Defendants*.	Case No. 2:23-CV-00103-JRG-RSP

DEFENDANTS' MOTION TO DISMISS FOR FAILURE TO STATE A CLAIM

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I. INTRODUCTION

Headwater Research LLC ("Headwater") alleges that Defendants Samsung Electronics Co., Ltd. ("SEC") and Samsung Electronics America, Inc. ("SEA") (collectively "Defendants" or "Samsung") infringe three patents-in-suit.[1] But Headwater proffers bare bones allegations that only contain screenshots of different sources and statements that, in many instances, merely repeat the asserted claim language, particularly with respect to the limitations identified in this motion. Such statements do not constitute a descriptive explanation of the screenshots that follow, and thereby fail to notify Defendants of Headwater's infringement allegations. Headwater's Complaint thus falls short of the *Twombly/Iqbal* standard.

For U.S. Patent No. 8,406,733 (the "'733 patent"), Headwater's Complaint glosses over several claim limitations, resulting in facially deficient allegations that, even if accepted as true, cannot establish infringement. For example, for the "service control link" element, Headwater's Complaint mentions the term only when parroting the claim language and makes no factual allegation as to where in the accused devices such an element may be present. Headwater commits similar flaws with respect to at least four other claim elements. So too for U.S. Patent No. 9,615,192 (the "'192 patent"), wherein the Complaint fails to identify any "secure message link," "network element messages," and other claim elements in the accused functionalities.

Finally, Headwater's U.S. Patent No. 9,198,117 (the "'117 patent") infringement allegations are also deficient. For example, while its claims require communications between a "device messaging agent" and a "network message server," Headwater accuses a hodgepodge of disparate functionalities without actually showing that each alleged "agent" actually communicates with the alleged "servers." For example, Headwater appears to accuse "the

[1] Samsung Display Co., Ltd. ("SDC") has been dismissed from the case. *See* Dkt. No. 25. This motion is therefore filed solely on behalf of Defendants SEC and SEA.

Firebase Cloud Messaging client app" of being a "device messaging agent," but Headwater fails to identify any corresponding "network message server" that communicates with this app. Moreover with respect to all accused functionalities, Headwater generally fails to identify limitations that enable these communications, such as "secure Internet data connections" and "a secure interprocess communication service." Thus, on Headwater's pleading, infringement cannot be plausibly inferred.

For these reasons, Defendants respectfully request that Headwater's claims for infringement be dismissed as to the asserted patents.[2]

II. LEGAL STANDARDS

To survive a motion to dismiss under Federal Rule of Civil Procedure 12(b)(6), a plaintiff must plead enough facts "to state a claim to relief that is plausible on its face." *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 547 (2007)). A claim is plausible on its face "when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged." *Iqbal*, 556 U.S. at 678. A court must dismiss a claim if the facts alleged do not support a reasonable inference of liability, a standard that "asks for more than a sheer possibility" that the defendant engaged in wrongful acts. *Id.* Thus, a court need not "accept as true a legal conclusion couched as factual allegation," *id.* (quotation omitted), nor allegations "that are conclusory in nature." *Thomas v. Esper, Sec'y of the Army*, No. 5:18-cv-110-RWS-CMC, 2019 WL 3026951, at *2 (E.D. Tex. May 22, 2019) (citation omitted). A pleading with only "labels and conclusions" or "a formulaic recitation of the elements of a cause of action will not do." *Twombly*, 550 U.S. at 555.

[2] These identified deficiencies in Headwater's infringement theories are only exemplary. Defendants expect and reserve the right to identify more deficiencies as the case progresses.

A plaintiff must "provid[e] facts sufficient to create a plausible inference that ***each element of the claim*** is infringed by the accused products." *Diem LLC v. BigCommerce, Inc.*, No. 6:17-CV-186 JRG-JDL, 2017 WL 9935521, at *2 (E.D. Tex. May 11, 2017) (emphasis added).

III. STATEMENT OF FACTS

Headwater filed its Complaint on March 10, 2023, asserting infringement of the '117, '192, and '733 patents. Dkt. 1. Headwater's Complaint included three claim charts, each containing Headwater's infringement allegations for claim 1 of each of the three asserted patents. Dkts. 1-4 ('733 patent), 1-5 ('117 patent), 1-6 ('192 patent). Other than in the claim charts, Headwater's Complaint does not set forth a description of where each claim limitation is purportedly found in the accused devices. Dkt. 1, ¶¶ 63, 78, 93.

IV. ARGUMENT

Headwater's Complaint fails to state a plausible claim of infringement. The "key to patent infringement is not just identifying [] products, but identifying ***how*** those products allegedly infringe the Asserted Patent claims." *See VStream Techs., LLC v. PLR IP Holdings, LLC*, No. 6:15-cv-974-JRG-JDL, slip op. at 7 (E.D. Tex. Aug. 24, 2016) (emphasis added). In *Chapterhouse, LLC v. Shopify, Inc.*, for example, this Court dismissed a complaint that "[did] not contain materially more than [] bare bones allegations." No. 2:18-CV-00300-JRG, 2018 WL 6981828, at *2 (E.D. Tex. Dec. 11, 2018). The Court explained that a conclusory statement parroting a claim limitation followed by "supporting" screenshots do not pass the *Iqbal/Twombly* standard. *Id.*

As in *Chapterhouse*, Headwater's Complaint does not contain "materially more" than barebones allegations. While Headwater's Complaint "breaks . . . exemplary claim[s] into individual elements with 'supporting' screenshots," that alone is insufficient. *Id.* "While screenshots may be useful in laying out a plausible allegation of patent infringement, Plaintiff must

further allege how the screenshots meet the text of the exemplary claim in order to lay out sufficient factual allegations which might permit the Court to find that the Iqbal/Twombly standard is met." *Id.* (noting that additional explanation may be merited for patents covering "hardware and software" claims relative to "relatively simple" mechanical patents). Headwater fails to provide such allegations with respect to several limitations, doing no more than cobbling together screenshots of various sources, which in many instances are not even linked to the claim elements they purportedly illustrate.

Headwater may argue that, in contrast to *Chapterhouse*, its Complaint includes "descriptive explanations of the screenshots" in its attached claim charts. *See Liberty Peak Ventures, LLC v. Regions Fin. Corp.*, No. 2:21-CV-00417-JRG, 2022 WL 798030, at *2 (E.D. Tex. Mar. 15, 2022). That argument fails, however, as although Headwater's charts provide some description for a subset of screenshots, they do so on a selective basis—leaving many claim terms unaddressed. The elements identified in this motion generally reflect such ignored limitations. Because infringement requires a showing of each element of an asserted claim, Headwater's Complaint does not pass the *Iqbal/Twombly* standard.

A. Headwater Failed to Adequately Plead Infringement of The '733 Patent.

Headwater's Complaint does not provide any evidence or explanation as to how the accused devices practice several limitations of the '733 patent, namely (1) service control link, (2) control-plane communications, (3) service control device link agent, (4) service control server link element, and (5) agent communication bus. Indeed, aside from parroting the claim limitations, Headwater does not once mention these claim elements in its Complaint. The deficiencies with respect to each of the limitations is discussed in turn below.

1. "service control link"

Claim 1 of the '733 patent requires an end-user device to communicate with a network system "over a service control link provided by the network system over a wireless access network." *See* '733 patent at 163:49-50. The claim further requires the "service control link" be "secured by an encryption protocol" and "configured to support control-plane communications." *Id.* at 163:50-52. The specification of the '733 patent depicts a service control link 1653 in Fig. 16:

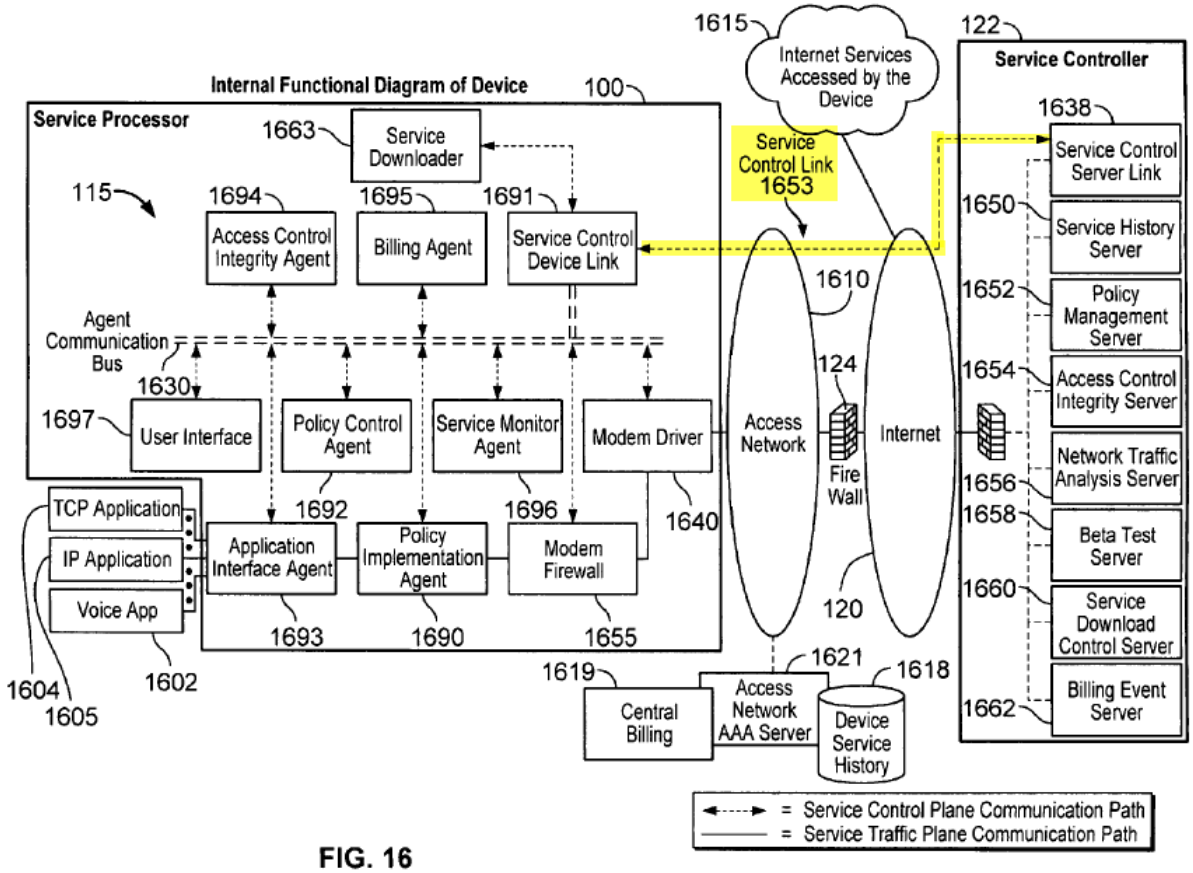

FIG. 16

Headwater's claim chart does not identify a "service control link" in the accused devices. Headwater alleges that the "wireless access network" limitation is met by "a wi-fi network and/or a cellular network." Dkt. 1-4 at 2-3 ("For example, the Galaxy S22 includes a plurality of wireless modems for communicating with a network system over a wi-fi network and/or a cellular

network (a 'wireless access network').”); *id*. at 7-8 (same allegation for “Samsung's Tizen based devices”). But Headwater completely ignores the “service control link” limitation.

Headwater's failure to identify a “service control link” continues in its discussion of a subsequent claim limitation (limitation 1[d]), which requires that the accused devices receive an “encrypted agent message” “over the service control link.” *See* '733 patent at 163:65-67 (limitation 1[d]). Without identifying any “service control link,” Headwater has similarly failed to identify that “an encrypted agent message” is received over the “service control link.” The closest allegation for this limitation is that the accused devices receive messages “from a server,” but Headwater does not provide any further detail. Dkt. 1-4 at 45, 50, 56. Thus, even when viewed in the light most favorable to Headwater, Headwater's infringement allegations do not show that an encrypted agent message is received over a “service control link.”

2. “control-plane communications”

Claim 1 of the '733 patent recites that a “service control link,” discussed above, is “configured to support control-plane communications.” '733 patent at 163:51-52. But Headwater's Complaint remains silent on what constitutes “control-plane communications” in the accused devices and fails to even allege that the accused devices engage in any type of “***control-plane*** communications,” whether supported by a “service control link” or not. Headwater merely alleges that the “wireless access network” limitation is met by “a wi-fi network and/or a cellular network” (Dkt. 1-4 at 2-3, 7-8) but ignores the “control-plane communications” limitation. But such an allegation, even if true, does not establish that the communications include “control-plane communications.”

3. "service control device link agent" and "service control server link element"

Claim 1 of the '733 patent requires that certain communications take place between a "service control device link agent" and a "service control server link element." For example, the claim requires that the "control-plane communications" are received by a "service control device link agent," *see* '733 patent at 163:51-54 (limitation 1[a]), and that the "service control device link agent" is configured to receive an "encrypted agent message" from "service control server link element." *Id.* at 163:64-67 (limitation 1[d]).

Headwater's Complaint ignores these claim requirements. Headwater contends, in broad strokes, that the accused "phones and tablets" communicate with a network system but does not identify a "service control device link agent" on such phones and tablets that receives such network communications. *See, e.g.*, Dkt. 1-4 at 3 ("Samsung Galaxy phones and tablets use encryption protocols to secure communications between the device and the network system."). Headwater's allegations for the "service control server link element" do not fare any better. Headwater simply asserts that encrypted messages are received "from a server" and does not explain what a "service control server link element" is in such a server, let alone how a "service control server link element" sends an "encrypted agent message" to an end-user device. *Id*. at 33 ("Samsung Galaxy phones and tablets receive encrypted messages ***from a server***."); *id*. at 37 ("Samsung's Tizen based devices receive encrypted messages ***from a server***."); *id*. at 44.

4. "agent communication bus"

Claim 1 of the '733 patent recites "agent communication bus" twice, requiring that "device agents" are coupled to the "service control device link agent" "through an agent communication bus," *see* '733 patent at 163:55-59 (limitation 1[b]), and that a message from a server is delivered to a particular device agent "over the agent communication bus." *Id*. at 164:10-12 (limitation

1[f]). Headwater asserts that the accused devices "comprise multiple device agents which have an identifier" (Dkt. 1-4 at 13, 16, 21) and "deliver message content to particular device agents based on identifier." Dkt. 1-4 at 57, 60, 67. Nowhere in the Complaint, however, does Headwater identify an "agent communication bus" that connects the alleged device agents and over which the alleged message content is delivered. Indeed, Headwater does not even mention the term "agent communication bus" in its chart other than when parroting the claim limitations. *Id*. at 13, 57.

As a result, even if Headwater's factual allegations are accepted as true, Headwater's Complaint is insufficient to create a plausible inference of infringement of the '733 patent by any accused device.

B. Headwater Failed to Adequately Plead Infringement of The '192 Patent

1. "secure message link"

Claim 1 of the '192 patent recites a "message link server" that comprises "a transport services stack to maintain a respective *secure message link*." '192 patent at 167:8-16. Although Headwater superficially identifies two examples of message link servers (i.e., the so-called "Samsung's push messaging server" related to the "Tizen App" and the so-called "Samsung Knox server"), it fails to identify any "secure message link" maintained by those servers. Dkt. 1-6 at 4-10. Headwater instead simply repeats the claim language and alleges that such a link exists without identifying what it is. *See id.* at 5, 8 (asserting, without identification, that there is a "secure message link" over which messages are sent). For example, Headwater's Knox citations lack any prose explanation and instead graphically illustrate an unexplained blue dashed or arrowed line connecting consumer devices to a cloud designated "Samsung Knox Manage." *Id.* at 9-10. Even speculating Headwater is suggesting that blue line somehow indicates the existence of a "link," it fails to explain what aspect constitutes a "secure message link." Indeed, none of

those words ("secure," "message," or "link") appear on the reproduced graphic. *Id.* While the words "messages" and "secure" do appear on the source website for that graphic, it is unclear whether, and if so how, Headwater contends this source website evidences the existence of a "secure message link." *See* https://docs.samsungknox.com/admin/knox-manage/welcome.htm. This source website instead indicates there are multiple components of Knox Manage, which only further obfuscates what about this functionality Headwater believes constitutes a secure message link.

2. "network element messages comprising respective message content and requests for delivery of the respective message content"

Claim 1 of the '192 patent recites that the message link server can receive "network element messages comprising respective message content and requests for delivery" that are apparently sent by "network elements." '192 patent at 167:17-24. Headwater does not describe the alleged screenshot-based evidence of infringement in any meaningful way and instead essentially repeats the claim language. *See* Dkt. 1-6 at 11, 16 (claiming certain alleged servers "receive messages from a plurality of network elements (e.g. App servers) which comprise content and delivery requests to devices and software components"). As with the "secure message link" element discussed above, Headwater's allegations with respect to Samsung Knox Manage are particularly deficient. *Id.* at 16-17. First, Headwater fails to identify what it contends constitutes network elements, alleging only that unidentified "App Servers"—which do not appear in the reproduced Knox Manage graphics—are examples of them. Further, having failed to identify what it contends are network elements, Headwater's allegations lack any explanation regarding what constitutes "message content" or "requests for delivery" sent by these unidentified network elements—much less the recited components of that message content ("data for, and an identification of, a respective one of the authorized software components").

3. "the trigger is an occurrence of an asynchronous event with time-critical messaging needs"

Claim 1 of the '192 patent recites that the message link server has a "message buffer system" with "logic to determine when one of a plurality of message delivery triggers" occur, one of these triggers being "an occurrence of an asynchronous event with time-critical messaging needs." '192 patent at 167:24-38. While Headwater's identification of "logic," "message buffer system," and "triggers" are generally deficient with respect to both the accused Tizen and Knox manage functionalities, Headwater's allegations are especially deficient with respect to the "asynchronous event" trigger. Dkt. 1-6 at 38-47. With respect to Tizen, Headwater cites to Tizen documentation addressing the delivery mechanism for notifications, which depends on "whether the application is running." *Id.* at 38-42. Yet Headwater fails to identify any of these conditions as constituting the recited trigger. *Id.* at 38 (explanatory prose referencing only "whether a delivery trigger that is not based on the receipt of the message has occurred"). Headwater's allegations with respect to Knox Manage are even more deficient, vaguely refencing passages regarding updating "an existing device profile." Again, Headwater's explanatory prose fails to even mention the "asynchronous event" claim language. *Id.* at 42.

The patent specification provides scant guidance regarding how Headwater contends this claim element is present. The sole passage tying "asynchronous" to "messaging" provides only the examples of "a transaction or service billing event" or "a user request." '192 patent at 38:50-63. Headwater's infringement allegations reference neither scenario.

4. "transport services stack"

Claim 1 of the '192 patent recites "a transport services stack to maintain a respective secure message link . . . between the message link server and a respective device link agent on each . . . end-user device[]." '192 patent at 167:9-12. The Complaint, however, identifies no such

element in the prose allegedly characterizing the cited screenshot evidence. Dkt. 1-6 at 5, 8. Tellingly, with respect to the limitation that introduces this claim element ([1a]), the attached claim chart limits its focus to documentation that allegedly demonstrates the "secure message link" limitation, without any reference to the claimed "transport services stack." *Id.*

C. Headwater Failed to Adequately Plead Infringement of The '117 Patent.

Despite asserting claims that require a "network system" that includes a server, Headwater fails to identify any alleged server—at least with respect to the accused Firebase Cloud Messaging functionality. Moreover, Headwater's Complaint does not provide any evidence or explanation as to how the accused devices practice at least two limitations of the '117 patent, namely (1) secure Internet data connections and (2) a secure interprocess communication service. Instead of describing how the Tizen, Knox, and Firebase Cloud Messaging functionalities meet these claim elements, Headwater instead generically cites to documentation with no further explanation.

1. Headwater's Infringement Theory Regarding FCM Functionality is Facially Deficient.

Headwater's infringement allegation for the '117 patent is facially deficient. Claim 1 of the '117 patent (the only claim charted by Headwater) recites a "network message server" and a "device messaging agent." '117 patent at 163:47, 51. Claim 1 requires "the network message server to generate corresponding Internet data messages" and "to transmit each of the generated Internet data messages to the device messaging agent." *Id.* at 163:63-164:3. Claim 1 also requires "each device messaging agent, when executing, to receive the Internet data messages." *Id.* at 164:7-8. Thus, for each accused "device messaging agent," Headwater must also identify a corresponding "network messaging server" that transmits "Internet data messages" to that particular accused "device messaging agent." For the "device messaging agent" limitation, Headwater identifies several different features, including "the FCM client app." Dkt. 1-5 at 5-

15. However, Headwater fails to identify a corresponding "network message server" that transmits messages to the accused FCM client app. As a result, even if the FCM client app constituted a "device messaging agent," Headwater's infringement theory would fail because Headwater did not identify any "network message server" that communicates with the FCM client app. Accordingly, Headwater's infringement allegation should be dismissed.

2. "secure Internet data connections"

Claim 1 of the '117 patent requires a network message server to "support[] a plurality of secure Internet data connections, each secure Internet data connection between the network message server and a respective one of the mobile end-user devices." *See* '117 patent at 163:51-55. Each "secure Internet data connection" supports a particular device, enabling a device messaging agent located on a device to use its corresponding connection to receive "Internet data messages." *Id.* at 163:1-10.

Headwater's Complaint entirely fails to identify "secure Internet data connections" in the accused devices. Headwater merely alleges that the Tizen and Knox Manage functionalities meet the "secure Internet data connections" limitation while simultaneously ignoring the substance of the limitation. With respect to Tizen, Headwater cites to documentation that references a "permanent connection between the device and the push server," yet it does not explain what about this "permanent connection" constitutes the recited "secure" Internet data connection or how it contends there is a "plurality" of them. *See* Dkt. 1-5 at 23-28. Similarly, with respect to Knox Manage, Headwater relies on graphics that depict an unexplained blue dashed or arrowed line connecting consumer devices to a cloud designated "Samsung Knox Manage." *Id.* at 28-30. Again, speculating that Headwater contends that blue line somehow indicates the existence of a "secure Internet data connection," it fails to explain what aspect enables transmission of the recited "Internet data messages."

3. "a secure interprocess communication service"

Claim 1 of the '117 patent requires "each device messaging agent" to "map the application identifier in [each received] message to a software process corresponding to the application identifier, and forward the application data in the message to the software process via a *secure interprocess communication service*." '117 patent at 164:11-15.

Headwater's Complaint fails to identify "a secure interprocess communication service" in the accused devices. While Headwater cites to documentation associated with the Tizen, Knox, and Firebase Cloud Messaging functionalities with respect to the claim limitation containing this element ([1h]), it does not identify what aspect of those functionalities satisfies this particular element. It instead essentially repeats three times, without explanation, the surrounding claim language. Dkt. 1-5 at 68, 70, 76-77 (noting that Samsung devices "map[] the identifier in the message to a corresponding software process and forward the data to the application via a secure service").

V. CONCLUSION

Because Headwater's Complaint contains insufficient facts from which infringement can be plausibly inferred, Defendants respectfully request dismissal of Headwater's infringement allegations against the asserted patents.

Dated: July 10, 2023

Respectfully submitted,

By: */s/ Thad C. Kodish*

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above and foregoing document has been sent to all counsel of record who are deemed to have consented to electronic service via the Court's CM/ECF system per Local Rule CV-5(a)(3).

DATED: July 10, 2023

By */s/ Thad C. Kodish*
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